

## Remarks

Claims 41 - 47 are pending. Favorable reconsideration is respectfully requested.

The present invention is directed to improved baking molds which are formed of a transparent silicone elastomer. In the past, such baking molds, for example, baking sheets and loaf and muffin "pans" of addition-cured silicone were prepared by employing platinum catalysts, which have numerous disadvantages. A chief disadvantage is a yellow or brown color which is observable, caused by colloidal catalyst precipitates. It was desired by manufacturers of such products to offer transparent products free of such precipitates, but how to do so without resorting to peroxide-cured products, with their notable disadvantages, was unknown.

The references cited by the Office in rejecting the prior claims do not teach or suggest the claimed invention to the skilled artisan. As indicated in the specification, the aim of the invention was to provide elastomeric silicone baking molds free of the discoloration brought about by platinum catalysts. Applicants respectfully submit that none of the cited references, either alone or in combination, teach or suggest how to prepare a solid, transparent elastomer free of observable colloidal catalyst precipitates.

*Miyoshi* EP 1 043 363 discloses mother molds for casting plastic parts, prepared from a crosslinkable silicone composition of an alkenyl-functional silicone, an Si-H functional silicone, and a catalyst. Several catalysts are mentioned, including platinum catalysts, palladium catalysts, and two specific, triphenylphosphine ligand-containing rhodium catalysts. The composition also contains an oily substance which, upon continued use, bleeds to the surface, serving as a parting agent.

One skilled in the art of baking molds for food products would not be motivated to look to *Miyoshi* for any solution to the problem of observable catalyst precipitates. First, *Miyoshi's* molds are purposefully designed to continually exude oily substances until the latter

are exhausted. The oily substances are there to facilitate parting. One producing a food mold would wish the parting to continue unabated during the lifetime of the mold, not to rely on exuding of a parting agent which of necessity must stop at some point, and may be removed by dishwashing. Moreover, those involved in making and using food molds certainly do not wish their molds to contaminate the food product with exuded liquid. This is the first reason one would not look to *Miyoshi*.

The second reason is that *Miyoshi* does not direct the skilled artisan to the solution of the problem solved. There are hundreds if not thousands of hydrosilylation catalysts, and *Miyoshi's* mention of but a few catalysts of different types does not direct the skilled artisan to any particular type. Platinum catalysts are far, far more common than any other kind of hydrosilylation catalyst, and in fact, all of *Miyoshi's* examples employ platinum catalysts. If one skilled in the art were interested in making a resin casting mold, as taught by *Miyoshi*, he would be motivated to employ the common catalysts, those used by *Miyoshi*, *i.e.* platinum catalysts.

If one skilled in the art were motivated to make a mold which is transparent, what would *Miyoshi* suggest to that person? The answer is: nothing. *Miyoshi* does not even mention transparency and how to achieve it. *Miyoshi* does not direct the skilled artisan in any direction to find a catalyst system which avoids observable catalyst residues. It is well established in the law that a reference which does not even discuss the problem solved cannot suggest a solution, and that such a reference cannot render an invention which solves this problem obvious. *In re Shaffer*, 108 USPQ 326 (CCPA 1956). The question of obviousness is whether *Miyoshi* would direct one desirous of making a transparent food mold to the rhodium and iridium catalysts claimed. Applicants submit that there is no such direction provided by *Miyoshi*.

*Ebbrecht* also, is not directed to food molds of any kind. *Ebbrecht* is directed to crosslinking of acrylate-functional silicones, silicones which are not within the scope of the claims, and which would not be used in molds desired to bake food goods in an oven, due to

their low thermal stability at baking temperatures (usually 350° - 450°F) and their ease of hydrolysis from basic constituents of most baking goods. Moreover, *Ebbrecht's* products are all liquids.

*Ebbrecht* discloses that platinum catalysts cause an addition reaction of acrylates with Si-H functional silicones where addition takes place at the keto group of the ester and not the double bond, thus resulting in a product containing hydrolyzable Si-O-C(OR)-CH=CH<sub>2</sub> and Si-O-C(OR)=CH-CH<sub>3</sub> groups (hydrolyzable because of the Si-O-C linkage). *Ebbrecht* discovered that with acrylates, certain rhodium catalysts instead caused normal 1,2-addition across the double bond.

Applicants' silicones are not formed from acrylate-functional organopolysiloxanes. In Applicants' organopolysiloxanes, the unsaturated groups are C<sub>2-14</sub> hydrocarbon groups, not hydrocarboxy groups. Applicants' claims do not allow for use of acrylate monomers, nor would one skilled in the art be motivated to use such, due to their known disadvantages. Since Applicants do not employ acrylates, there would be no need to look to *Ebbrecht* for any teaching. Moreover, *Ebbrecht* does not teach or suggest any solution to solving the transparency problem; and importantly, all the products produced by *Ebbrecht* are liquids, not elastomeric solids, and cannot be used as baking molds.

Nor is there any motivation to combine *Ebbrecht* with *Miyoshi*. *Ebbrecht* teaches use of certain rhodium catalysts for acrylate-functional systems. *Miyoshi* is not directed to such systems, but to alkenyl-functional systems for which 1,2-addition is the usual mode of addition, and where it would not matter if the addition were otherwise, since the aim is to provide C-Si bonds which would form regardless of the mode of addition.

It is well established that merely because references are capable of physical combination, this is not sufficient for their combination. *In re Regal*, 188 USPQ 135 (CCPA 1975). Rather, as recently explained several times by the Court of Appeals for the Federal Circuit, evidence to combine must be strong.

In the case of *In re Anita Dembiczak and Benson Zinbarg*, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999), the CAFC has indicated that the requirement for showing the teaching or motivation to combine references is "rigorous." *Dembiczak* at 1617. Moreover, this showing, which is rigorously required, must be "clear and particular." *Dembiczak* at 1617. See also, *C.R. Bard v. M3 Sys., Inc.*, 48 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1998). It is well established that merely because references can be combined, the mere suitability for logical combination does not provide motivation for the combination. See, *Berghauser v. Dann, Comr. Pats.*, 204 U.S.P.Q. 398 (DCDC 1979); *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929 (Fed. Cir. 1984). Moreover, mere conclusory statements supporting the proposed combination, standing alone are not "evidence". *McElmurry v. Arkansas Power & Light Co.*, 27 U.S.P.Q.2d 1129, 1131 (Fed. Cir. 1993). See also, *In re Lee*, 61 U.S.P.Q. 2d 1430 (Fed. Cir. 2002).

Here, there is no evidence of any motivation to combine. The rhodium catalysts of *Ebbrecht* are used to overcome a problem with acrylate-functional silicones which is totally absent in *Miyoshi*. Since *Miyoshi* does not use acrylate-functional silicones, he would not be motivated to look to *Ebbrecht* for any teaching.

Even were these references combinable, it is well established that one cannot simply pick and choose isolated teachings from the references while ignoring other salient features of the references. *In re Wesslau* 147 USPQ 391, 393 (CCPA 1965). Here, *Ebbrecht* uses rhodium catalysts only because he also employs acrylate-functional silicones. Thus, the "rhodium catalyst" aspect of *Ebbrecht* cannot be surgically removed from the other salient teaching: acrylate-functional silicones; this is the entire *raison d'être* for his invention. Thus combination of *Ebbrecht* with any other reference must also include the use of acrylate-functional silicones. However, Applicants do not employ these, and therefore the combination of *Miyoshi* and *Ebbrecht* does not teach or suggest the claimed invention.

Hompanera U.S. Patent 6,197,369 ("*Hompanera*") teaches that baking molds should be produced by crosslinking addition-crosslinkable organopolysiloxanes with a platinum

catalyst. This is exactly what Applicants desire not to do. Teaching away is strong evidence of non-obviousness. *W.L. Gore v. Garlock*, 220 USPQ 303 (Fed. Cir. 1983). *Hompanera* does not teach or suggest that any other hydrosilylation catalyst should be used. Rather, he teaches that platinum should be used.

There is no motivation to combine *Ebbrecht* with *Hompanera*. *Hompanera* uses methylvinylorganopolysiloxanes and not acrylate-functional silicones. Thus, there is no motivation to use rhodium catalysts to solve a problem which does not exist. Second, as was the case with *Miyoshi*, if *Ebbrecht* is to be combined with *Hompanera*, *Ebbrecht's* use of acrylate-functional silicones must be included in the *Hompanera* composition as well. However, not only would one skilled in the area of molds not be motivated to use an acrylate, but moreover, employing an acrylate in *Hompanera's* composition would not result in Applicants' compositions, which do not employ acrylates.

In all fairness to Applicants, none of the references, whether alone or in any combination, teach or suggest Applicants' claimed invention. The claims have been amended to limit the rhodium catalysts employed to those of claim 1. These catalysts are not taught or suggested by the prior art. All the claim limitations were either present in the claims as filed, or in the specification, and thus there is no issue of new matter. Entry of the amendment is solicited, as first, the claims form a coherent set with further limitations which are believed to patently distinguish over the references and which render moot the issue of whether or not the prior Examiner's amendment had been entered; and second, the amendment addresses a new rejection not previously of record, to which Applicants have not had a chance to respond. The amendment will also simplify issues for appeal, should appeal be necessary.

Applicants submit that the claims are now in condition for Allowance, and respectfully request a Notice to that effect. If the Examiner believes that further discussion will advance the prosecution of the Application, the Examiner is highly encouraged to telephone Applicants' attorney at the number given below.

Respectfully submitted,

**ARMIN FEHN et al.**

By 

William G. Conger

Reg. No. 31,209

Attorney/Agent for Applicant

Date: February 14, 2006

**BROOKS KUSHMAN P.C.**  
1000 Town Center, 22nd Floor  
Southfield, MI 48075-1238  
Phone: 248-358-4400  
Fax: 248-358-3351